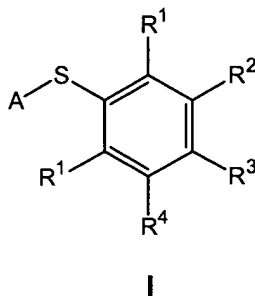


**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

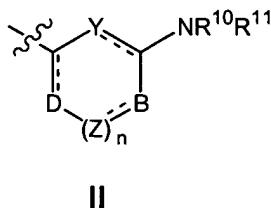
1. (currently amended) A compound of formula I



or a pharmaceutically acceptable salt or prodrug thereof,

wherein at least one of R<sup>1</sup> or R<sup>3</sup> is a pyrimidine;

R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are each independently selected from the group consisting of hydrogen, halogen, alkyl, haloalkyl, alkoxy, cyano, nitro, cycloalkyl, carboxaldehyde, and a group of formula II defined as



**and wherein at least one of R<sup>1</sup> or R<sup>3</sup> is a pyrimidine;**

subject to the proviso that one or more than one of R<sup>1</sup> or R<sup>3</sup> is a group of formula II as defined above;

~~wherein D, B, Y and Z at each occurrence~~ are each independently selected from the group consisting of  $-CR^6=$ ,  $-CR^7R^8-$ ,  $-C(O)-$ ,  $-O-$ ,  $-SO_2-$ ,  $-S-$ ,  $-N=$ , and  $-NR^9-$ ;

n is an integer of zero to three;

$R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$ , ~~at each occurrence~~ are each independently selected from the group consisting of hydrogen, alkyl, carboxy, hydroxyalkyl, alkylaminocarbonylalkyl, dialkylaminocarbonylalkyl and carboxyalkyl; and

$R^{10}$  and  $R^{11}$  are each independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, alkoxyalkyl, alkoxycarbonylalkyl, carboxyalkyl, hydroxyalkyl, heterocyclyl, heterocyclylalkyl and heterocyclylamino; or

$R^{10}$  and  $R^{11}$  are taken together with N to form a three to seven membered unsubstituted heterocyclyl ring, or a three to seven membered substituted heterocyclyl ring, substituted with one or more than one substituent  $R^{13}$ , wherein  $R^{13}$ , ~~at each occurrence~~ is independently selected from the group consisting of alkyl, alkylene, alkoxy, alkoxyalkyl, cycloalkyl, aryl, heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, heterocyclylalkylaminocarbonyl, hydroxy, hydroxyalkyl, hydroxyalkoxyalkyl, carboxy, carboxyalkyl, carboxycarbonyl, carboxaldehyde, alkoxycarbonyl, arylalkoxycarbonyl, aminoalkyl, aminoalkanoyl, aminocarbonyl, carboxamido, alkoxycarbonylalkyl, carboxamidoalkyl, cyano, tetrazolyl, alkanoyl, hydroxyalkanoyl, alkanoyloxy, alkanoylamino, alkanoyloxyalkyl, alkanoylaminoalkyl,

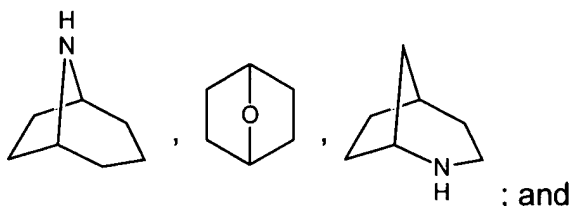
sulfonate, alkylsulfonyl, alkylsulfonylaminocarbonyl,  
arylsulfonylaminocarbonyl and heterocyclysulfonylaminocarbonyl;  
wherein A is an unsubstituted aryl group, an unsubstituted heterocyclyl group, a  
substituted aryl group, or a substituted heterocyclyl group, substituted with  
one or more than one substituent R<sup>12</sup>, wherein R<sup>12</sup>, ~~at each occurrence~~, is  
independently selected from the group consisting of halogen, alkyl, aryl,  
haloalkyl, hydroxy, alkoxy, alkoxyalkyl, alkoxycarbonyl, alkoxyalkoxy,  
hydroxyalkyl, aminoalkyl, aminocarbonyl, alkyl(alkoxycarbonylalkyl)  
aminoalkyl, heterocyclyl, heterocyclylalkyl, carboxaldehyde,  
carboxaldehyde hydrazone, carboxamido, alkoxycarbonylalkyl, carboxy,  
carboxyalkyl, carboxyalkoxy, hydroxyalkylaminocarbonyl, cyano, amino,  
heterocyclylalkylamino, carboxythioalkoxy, carboxycycloalkoxy, thioalkoxy,  
carboxyalkylamino, trans-cinnamyl and heterocyclylalkylaminocarbonyl;  
and

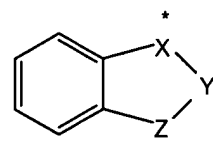
wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are unsubstituted  
or substituted with one or more than one electron donating or electron  
withdrawing group

wherein the heterocyclyl is chosen from 3-, 4-, 5-, 6- and 7-membered rings  
containing 1-3 heteroatoms independently selected from nitrogen, oxygen  
and sulfur; the 4- and 5-membered rings have zero to two double bonds  
and the 6- and 7-membered rings have zero to three double bonds, the  
~~heterocycle~~ **heterocyclyl** being optionally substituted with alkyl, halogen,  
hydroxy or alkoxy substituents,

further wherein the heterocyclyl optionally comprises a group chosen from:

- (i) bicyclic, tricyclic and tetracyclic groups in which any of the above heterocyclic rings is fused to one or two rings independently selected from an aryl ring, a cyclohexane ring, a cyclohexene ring, a cyclopentane ring, a cyclopentene ring, and another monocyclic heterocyclic ring;
- (ii) bridged bicyclic groups where a monocyclic heterocyclic group is bridged by an alkylene group optionally selected from

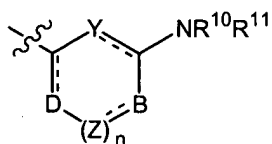


- (iii) compounds of the formula  where X\* and Z\* are each independently selected from -CH<sub>2</sub>-, -CH<sub>2</sub>NH-, -CH<sub>2</sub>O-, -NH- and -O-, with the proviso that at least one of X\* and Z\* is not -CH<sub>2</sub>-, and Y\* is selected from -C(O)- and -(C(R''))<sub>v</sub> -, where R'' is hydrogen or alkyl of one to four carbons, and v is 1-3.

2. (previously presented) A compound according to claim 1 wherein R<sup>3</sup> is the group of formula II

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

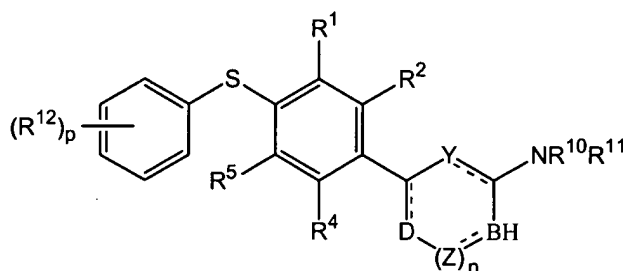


II

wherein R<sup>10</sup>, R<sup>11</sup>, D, B, Y, Z, and n are defined as in claim 1; and

R<sup>1</sup> is defined as in claim 1 with the proviso that if R<sup>3</sup> does not define a pyrimidine, then R<sup>1</sup> is a pyrimidine.

3. (previously presented) A compound according to claim 1 of formula III



III

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, D, B, Y, Z, and n are defined as in claim 1;  
and p is an integer of zero to five.

4. (previously presented) A compound according to claim 3 wherein p is one;

R<sup>4</sup> and R<sup>5</sup> are hydrogen;

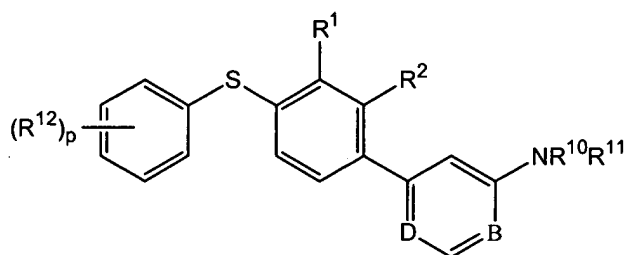
R<sup>12</sup> is selected from the group consisting of halogen, alkyl, alkoxy,  
carboxyalkoxy, carboxyalkyl and heterocyclyl;

R<sup>10</sup> and R<sup>11</sup> are taken together with N to form a three to seven membered  
unsubstituted heterocyclyl ring, or a three to seven membered substituted  
heterocyclyl ring, substituted with one or more than one substituent R<sup>13</sup>,  
wherein R<sup>13</sup> is defined as in claim 1, and wherein said substituted

heterocyclyl, or unsubstituted heterocyclyl ring is selected from the group consisting of piperidine, piperazine, morpholine, pyrrolidine, and azetidine; and

wherein  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$  and  $R^{13}$  are unsubstituted or substituted with at least one electron donating or electron withdrawing group.

5. (previously presented) A compound according to claim 1 of formula IV



IV

wherein D and B are each independently selected from the group consisting of  $-N=$  and  $-CR^6=$ ;

$R^1$  is selected from the group consisting of hydrogen, halogen and haloalkyl, with the proviso that if  $R^3$  does not define a pyrimidine, then  $R^1$  is a pyrimidine;

$R^2$  is selected from the group consisting of hydrogen, halogen and haloalkyl;

$R^{10}$  and  $R^{11}$  are defined as in claim 1;

$R^{12}$ , at each occurrence, is independently selected from the group consisting of halogen, alkyl, haloalkyl, alkoxy, carboxyalkoxy, carboxyalkyl and heterocyclyl, wherein  $R^{12}$  is unsubstituted or substituted with at least one electron donating group or electron withdrawing group; and

p is an integer of zero to five.

6. (previously presented) A compound according to claim 5 wherein p is one; and

R<sup>10</sup> and R<sup>11</sup> are taken together with N to form a three to seven membered substituted heterocyclyl ring, or a three to seven membered unsubstituted heterocyclyl ring, substituted with one or more substituents R<sup>13</sup>, wherein R<sup>13</sup> is defined as in claim 1, and wherein said substituted heterocyclyl ring, or unsubstituted heterocyclyl ring is selected from the group consisting of piperidine, piperazine, morpholine, pyrrolidine, and azetidine.

7. (previously presented) A compound according to claim 1, selected from the group consisting of 1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperidine-3-carboxylic acid, 4-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-6-(3-(2*H*-tetrazol-5-yl)-piperidin-1-yl)-pyrimidine, 4-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-6-(4-(2*H*-tetrazol-5-yl)-piperidin-1-yl)-pyrimidine, (1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperidin-3-yl)-methanol, 2-(1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperidin-4-yl)-ethanol, 4-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-morpholine, 1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperidin-4-ol, 4-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-2,5-dimethyl-morpholine, 1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperidine-3-carboxylic acid amide, 1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperidine-4-carboxylic acid amide, N-Ethyl-N-1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-pyrrolidin-3-yl)-acetamide, 1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperidine-3-carboxylic acid ethyl ester, 1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-

phenyl)-pyrimidin-4-yl)-piperidine-4-carboxylic acid ethyl ester, 4-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperazine-1-carboxylic acid ethyl ester, 4-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperazin-1-yl-acetic acid ethyl ester, (3-imidazol-1-yl-propyl)-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-amine, 1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperidine-4-carboxylic acid, 4-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperidine-3-carboxylic acid, 1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-piperidine-3-carboxylic acid diethyl amide, N-1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-pyrrolidin-3-yl)-acetamide, 4-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-6-(2-methoxymethyl-pyrrolidin-1-yl)-pyrimidine, 1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-pyrrolidin-3-ol, (1-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-pyrrolidin-3-yl)-carbamic acid *tert*-butyl ester, isopropyl-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-methyl amine, and ethyl-(6-(4-(2-isopropyl-phenylsulfanyl)-3-trifluoromethyl-phenyl)-pyrimidin-4-yl)-methyl-amine.

8. (previously presented) A composition comprising:

a compound according to claim 1

and a pharmaceutically acceptable carrier.

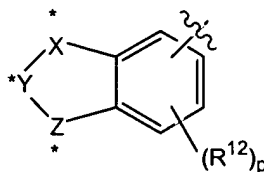
9. (previously presented) A method of inhibiting inflammation or suppressing immune response in a mammal comprising administering to said mammal a therapeutic amount of a compound according to claim 1.

10. (previously presented) A compound according to claim 1 wherein A is



(i) an unsubstituted or substituted aryl group, substituted by one or more than one substituent  $R^{12}$ , wherein  $R^{12}$  is defined as in claim 1, or

(ii) an unsubstituted or substituted heterocyclyl group of the formula



wherein

$R^{12}$  and is defined as in claim 1;

p is an integer of 0 to 5;

$X^*$  and  $Z^*$  are each independently selected from the group consisting of

$-CH_2-$ ,  $-CH_2NH-$ ,  $-CH_2O-$ ,  $-NH-$ , and  $-O-$ , with the proviso that at least one of  $X^*$  and  $Z^*$  is not  $-CH_2-$ ; and

$Y^*$  is  $-(C(R''))_v-$ , wherein

$R''$  is hydrogen or alkyl; and

v is 1, 2, or 3.

11. (previously presented) A compound according to claim 1 or 10 wherein A is an unsubstituted or substituted aryl group, wherein the aryl group is

(I) a mono- or a bicyclic carbocyclic ring system having one or two aromatic rings, or

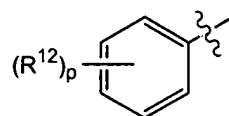
(ii) a mono- or a bicyclic carbocyclic ring system having one or two aromatic rings,

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HENDERSON  
FARABOW  
GARRETT &  
DUNNER <sup>LLP</sup>

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

wherein one or more than one of the aromatic rings is fused to a ring selected from the group consisting of cyclohexane, cyclohexene, cyclopentane, and cyclopentene.

12. (previously presented) A compound according to claim 1 wherein A is an unsubstituted or substituted aryl group of the formula



wherein  $R^{12}$  is defined as in claim 1; and p is an integer of 0 to 5.

13. (previously presented) A compound according to claim 1 wherein

D is  $CR^6=$  or  $-N=$ ,

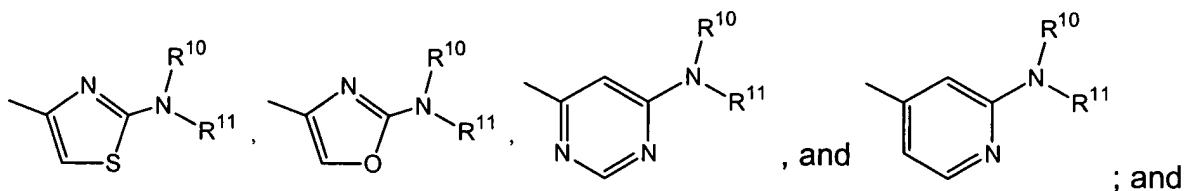
B is  $-S-$ ,  $-O-$ ,  $-CR^6=$  or  $-N=$ ,

Y is  $-CR^6=$  or  $-N=$ ,

Z is  $-CR^6=$  or  $-N=$ ; and

n is zero or one.

14. (previously presented) A compound according to claim 1 wherein  $R^3$  is selected from the group consisting of



$R^1$  is defined as in claim 1 with the proviso that if  $R^3$  does not define a pyrimidine, then  $R^1$  is a pyrimidine.

15. (previously presented) A compound according to claim 1 wherein,

D is  $-CR^6=$ ;

B is -O- or -S-;

Y is -N=; and

n is zero.

16. (previously presented) A compound according to claim 1 wherein

D is  $-CR^6=$  or  $-N=$ ;

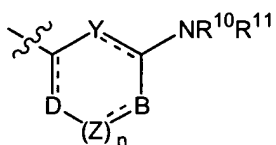
B is  $-N=$ ;

Y is  $CR^6=$ ; and

n is 1.

17. (currently amended) A compound according to claim 1 wherein

$R^1$  is selected from the group consisting of hydrogen, halogen, alkyl, and nitro,



and wherein  $R^{10}$ ,  $R^{11}$ , D, B, Y, Z, and n are defined

as in claim 1, with the proviso that if  $R^3$  does not define a pyrimidine, then

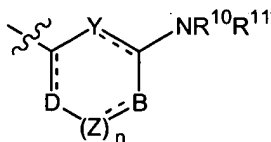
$R^1$  is a pyrimidine;

$R^2$  is selected from the group consisting of hydrogen, halogen, alkyl, and nitro;

$R^4$  and  $R^5$  are each independently selected from the group consisting of

hydrogen and alkyl; and

$R^3$  is



wherein

D is  $-CR^6=$  or  $-N=$ ,

B is -S-, -O-, -CR<sup>6</sup>= or -N=,

Y is -CR<sup>6</sup>= or -N=,

Z is -CR<sup>6</sup>= or -N=; and

n is zero or one

18. (previously presented) A compound according to claim 1 wherein

R<sup>1</sup> and R<sup>2</sup> are each independently selected from the group consisting of

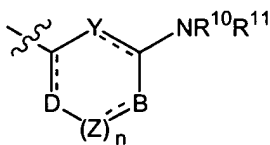
hydrogen, halogen, and haloalkyl;

R<sup>3</sup> is a pyrimidine; and

R<sup>4</sup> and R<sup>5</sup> are each independently hydrogen.

19. (currently amended) A compound according to claim 1 wherein

R<sup>1</sup> is selected from the group consisting of hydrogen, halogen, and haloalkyl,



and wherein R<sup>10</sup>, R<sup>11</sup>, D, B, Y, Z, and n are defined

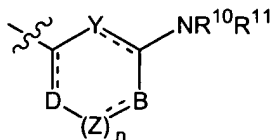
as in claim 1, with the proviso that if R<sup>3</sup> does not define a pyrimidine, then

R<sup>1</sup> is a pyrimidine;

R<sup>2</sup> is selected from the group consisting of hydrogen, halogen, and haloalkyl;

R<sup>4</sup> and R<sup>5</sup> are each independently hydrogen; and

R<sup>3</sup> is



wherein

D is -CR<sup>6</sup>= or -N=,

B is -S-, -O-, -CR<sup>6</sup>= or -N=,

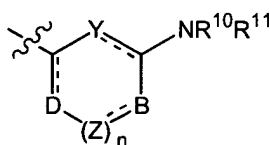
Y is -CR<sup>6</sup>= or -N=,

Z is -CR<sup>6</sup>= or -N=; and

n is zero or one.

20. (currently amended) A compound according to claim 1 wherein

R<sup>1</sup> is selected from the group consisting of hydrogen, halogen, ~~and~~ haloalkyl,



**and** wherein R<sup>10</sup>, R<sup>11</sup>, D, B, Y, Z, and n are defined

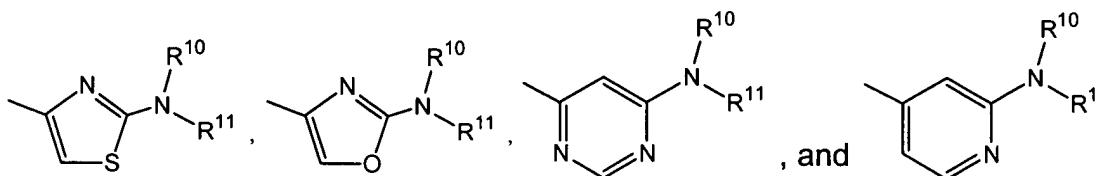
as in claim 1, with the proviso that if R<sup>3</sup> does not define a pyrimidine, then

R<sup>1</sup> is a pyrimidine;

R<sup>2</sup> is selected from the group consisting of hydrogen, chloro, and trifluoromethyl;

R<sup>4</sup> and R<sup>5</sup> are each independently hydrogen; and

R<sup>3</sup> is selected from the group consisting of



21. (previously presented) A compound according to claim 1 wherein R<sup>6</sup> is hydrogen.

22. (previously presented) A compound according to claim 1 wherein

R<sup>1</sup> is selected from the group consisting of hydrogen, halogen and haloalkyl,

R<sup>2</sup> is selected from the group consisting of hydrogen and halogen,

R<sup>3</sup> is a pyrimidine, and

R<sup>4</sup> and R<sup>5</sup> are each hydrogen.